Educational and Employment Outcomes for the Education and Training Voucher Program

1. Introduction

lowa College Aid administers the federal Education and Training Voucher (ETV) grant for the state of Iowa. ETV awards a maximum of \$5,000 per year for up to four years and is available to those who age out of the foster care system and attend a postsecondary institution before age 21. Students over age 23 are no longer eligible.

To determine educational and employment outcomes associated with receiving an ETV award, we used custom data sets developed by Iowa College Aid (ICA) combined with Free Application for Federal Student Aid (FAFSA) data, postsecondary data from the National Student Clearinghouse (NSC) and employment data from Iowa Workforce Development's Unemployment Insurance (UI) database.

We first discuss selected ETV cohorts descriptively, including their demographic breakdown and progression through their postsecondary career. We then provide a brief overview of a more in depth study of ETV recipients compared to lowans identified as those in foster care, orphans or wards of the state who did not receive ETV.

2. Descriptive Analysis

Table 1 shows the demographic breakdown of first-time ETV recipients by academic year, including age, gender, those with children, first generation status, Pell Grant eligibility and average Expected Family Contribution (EFC). In addition, the average first year ETV Award is listed.

Table 1: ETV Demographics by Cohort

	Age (years)	Female (%)	Children (%)	First Gen. (%)	Pell Eligible (%)	EFC (\$)	ETV Award (\$)	N
2008-09	19	71	6	71	99	413	4,596	96
2009-10	19	60	5	72	100	224	2,637	85
2010-11	19	52	0	62	99	483	2,679	77
2011-12	19	54	1	66	99	128	2,791	70
2012-13	19	60	0	64	98	126	3,045	107
2013-14	19	55	1	68	100	118	3,577	109
2014-15	19	63	9	57	100	36	3,133	112
2015-16	19	59	9	69	100	258	3,145	102
2016-17	19	65	10	65	100	150	3,000	82
2017-18	19	62	5	64	100	0	4,167	80
All Years	19	60	5	66	99	188	3,298	920

Between 77 and 95 percent of ETV recipients were matched to NSC records during the year following their first award, with match rates increasing for later years. Students may not have matched if they enrolled in an institution that does not report to NSC, typically barber and cosmetology schools and for-profit institutions. In some cases, students were matched to NSC records but missing necessary data, such as enrollment dates and were therefore excluded.

Table 2 shows persistence rates for eight years of postsecondary education. Persistence rates are calculated from year one. The largest drop in persistence is observed between years one and two.

Table 2: Persistence Rates by Cohort

	Enrollment by Year Following First ETV Award							
	1	2	3	4	5	6	7	8
2008-09	75	39 (52%)	35 (47%)	33 (44%)	21 (28%)	14 (19%)	13 (17%)	21 (28%)
2009-10	71	40 (56%)	32 (45%)	24 (34%)	15 (21%)	13 (18%)	15 (21%)	10 (14%)
2010-11	66	41 (62%)	24 (36%)	23 (35%)	19 (29%)	14 (21%)	7 (11%)	7 (11%)
2011-12	54	28 (52%)	18 (33%)	16 (30%)	14 (26%)	11 (20%)	12 (22%)	8 (15%)
2012-13	84	54 (64%)	43 (51%)	28 (33%)	22 (26%)	13 (15%)	8 (10%)	-
2013-14	102	58 (57%)	41 (40%)	32 (31%)	26 (25%)	20 (20%)	-	-
2014-15	100	56 (56%)	38 (38%)	29 (29%)	21 (21%)	-	-	-
2015-16	97	44 (45%)	36 (37%)	33 (34%)	-	-	-	-
2016-17	74	37 (50%)	26 (35%)	-	-	-	-	-
2017-18	76	35 (46%)	-	-	-	-	-	-

Table 3 shows graduation rates starting with the third year following receipt of an ETV award. Approximately one in four ETV recipients earn a postsecondary credential within eight years (cohorts 2008-09 through 2011-12).

Table 3: Graduation Rates by Cohort

	Completion by Year Following First ETV Award					
	3	4	5	6	7	8
2008-09	4 (5%)	10 (13%)	12 (16%)	15 (20%)	15 (20%)	16 (21%)
2009-10	11 (15%)	18 (25%)	19 (27%)	20 (28%)	22 (31%)	22 (31%)
2010-11	5 (8%)	8 (12%)	11 (17%)	13 (20%)	13 (20%)	15 (23%)
2011-12	4 (7%)	7 (13%)	8 (15%)	10 (19%)	11 (20%)	11 (20%)
2012-13	12 (14%)	16 (19%)	20 (24%)	21 (25%)	22 (26%)	-
2013-14	11 (11%)	19 (19%)	21 (21%)	22 (22%)	-	-
2014-15	8 (8%)	15 (15%)	18 (18%)	-	-	-
2015-16	5 (5%)	12 (12%)	-	-	-	-
2016-17	7 (9%)	-	-	-	-	-
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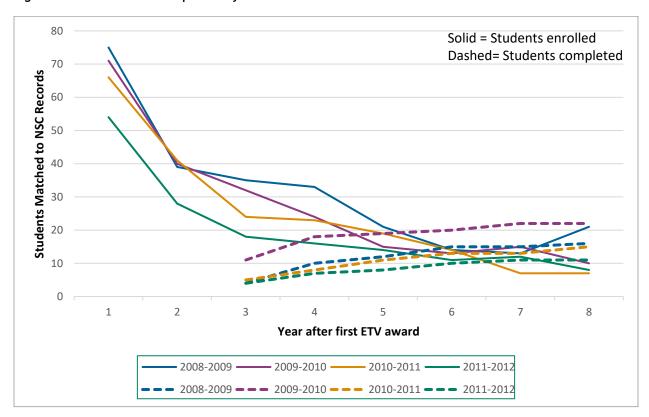
Table 4 breaks down the type of credential earned for those who completed. Over half of ETV recipients who completed a credential earned a 2 year credential or less; however, this table only includes the first credential a student earned after receiving ETV.

Table 4: Frequency of degrees completed within 8 years for 2008-09 through 2011-12 cohorts

Degree Type	Frequency
Diploma	5
Certificate	4
Associate's Degree	27
Bachelor's Degree	20
Other	8

Finally, Figure 1 shows the enrollment and completion rates for all students included in Tables 2 and 3.

Figure 1: Enrollment and Completion by Cohort



3. Additional Analysis Using Comparison Groups

In order to determine the effect of receiving ETV, we compared recipients to non-recipients who were matched on demographic characteristics. Here, we included all ETV cohorts with available data, back to 2004-05. These results are for a subset of the ETV population created for analysis and are not directly comparable to results in the previous section.

ETV recipients are more likely to persist and graduate than non-recipients (see Table 5). The point difference represents the difference in percentages who achieved each outcome, calculated in two ways. The first is the direct difference (ETV recipient percentage minus non-recipient percentage). The second (with demographics) includes additional student characteristics that are known to have an effect on postsecondary success, for example, parent education level and family income. Using an analytic model we attempted to isolate the impact of ETV, taking into account those additional known variables.

Table 5: ETV Postsecondary Outcomes with Comparison Sample

	Persisted	Graduated	Graduated	Graduated
		(4 years)	(6 years)	(8 years)
ETV Recipient	64.5%	12.6%	20.4%	28.3%
ETV Non-Recipient	47.5%	8.9 %	15.0%	20.0%
Point Difference	17.0	3.7	5.4	8.3
Point Difference - With Demographics	15.3	3.0	3.8	5.6

On the FAFSA, a student reports the type of credential they are pursuing. In Table 6 we list persistence and completion rates broken down by whether they indicated expected enrollment in an associate or bachelor's degree program. Students may enroll in program types other than what they selected on the FAFSA, or may change programs before completing. Here we only consider the information provided the year they first received ETV. For ETV recipients and non-recipients, those who intend to enroll in bachelor's programs are more likely to persist and complete a credential. ETV recipients outperform non-recipients in both associate and bachelor's programs.

Table 6: ETV Postsecondary Outcomes by Award and Program Intent

	Persisted	Graduated (4 years)	Graduated (6 years)	Graduated (8 years)
ETV Recipient				_
Associate Program	60.4%	11.2%	16.8%	22.1%
Bachelor's Program	73.2%	15.6 %	28.1%	41.7%
ETV Non-Recipient				
Associate Program	42.8%	8.9 %	12.9 %	16.1%
Bachelor's Program	61.6%	8.7%	22.3%	33.9%

Finally, we compared the ETV recipient and matched samples to UI data, from Iowa Workforce Development. This data was provided at one year intervals for four years following the end of postsecondary education. Table 7 shows the percentages of those who were found in the UI database, indicating that they were employed by a company in Iowa. Those who were unemployed, employed out of state or self-employed would not return a match. ETV recipients were significantly more likely to be matched to the UI database each year following the end of their postsecondary education. This data is also broken down by those who completed a postsecondary credential and those who did not.

Table 7: ETV Employment Rates with Comparison Sample

	UI Match - ETV Recipients (%)	UI Match - Non- Recipients (%)	Difference (%)
Year 1 Total	76.2	69.4	6.8
Credential: Attained	82.7	72.3	10.4
Credential: Not Attained	74.1	68.7	5.4
Year 2 Total	76.9	68.2	8.7
Credential: Attained	84.5	70.2	14.3
Credential: Not Attained	74.2	67.7	6.5
Year 3 Total	75.6	68.9	6.7
Credential: Attained	79.7	73.2	6.5
Credential: Not Attained	74.0	67.8	6.2
Year 4 Total	74.7	66.6	8.1
Credential: Attained	79.7	66.7	13.0
Credential: Not Attained	72.7	66.5	6.2

For those who were matched to the UI database and employed for a full year, we received average wages (see Table 8). While ETV recipients earned more on average, the large spread in wages resulted in no statistically significant differences between wages for ETV recipients and non-recipients. When looking at the breakdown of average wages by postsecondary completion status, again differences in wages were not statistically significant due to large spreads in wages and small numbers of students in each category.

Table 8: ETV Average Wages with Comparison Sample

	Avg. Wage -	Avg. Wage - Non-	Difference
	Recipients (\$)	Recipients (\$)	(\$)
Year 1	21,173	21,088	85
Credential: Attained	25,661	22,828	2,833
Credential: Not Attained	18,956	20,512	-1,556
Year 2	23,826	23,493	333
Credential: Attained	28,166	27,830	336
Credential: Not Attained	21,352	21,815	-463
Year 3	27,048	25,107	1,941
Credential: Attained	33,186	31,306	1,880
Credential: Not Attained	23,617	22,793	824
Year 4	29,605	27,234	2,371
Credential: Attained	37,787	33,642	4,145
Credential: Not Attained	25,376	24,376	1,000